

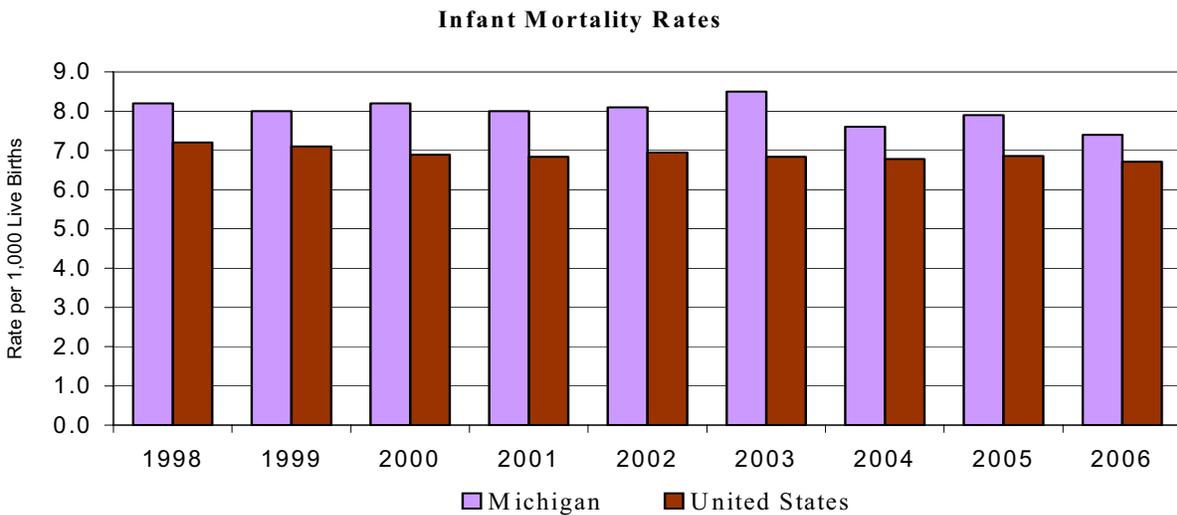


Topic: Infant and Child Health

26. Infant Mortality

Infant mortality refers to the number of deaths to children under age one (infants). It is measured as Infant Mortality Rate (IMR) that means the number of infant deaths per 1,000 live births. Infants with low birth weight or pre-term delivery have a higher risk of infant death. Socioeconomic status, lifestyle behaviors, health of the mother before pregnancy, prenatal care, and medical care for the infant are factors that impact infant mortality.

How are we doing?



In 2006, there were 940 infant deaths in Michigan, resulting in a death rate of 7.4 per 1,000 live births (infant mortality rate – IMR). During the past 10 years, Michigan’s infant mortality rate has been fluctuating with a decline below 8.0 per 1,000 for the first time in 2004. The rate has remained below 8.0 in 2005 and 2006. Post neonatal deaths, babies who die after the 28th day of life, make up almost one third of Michigan’s infant deaths annually. The state has experienced a dramatic decline in SIDS over the last 10 year, a 72% reduction since the national Back to Sleep campaign. However, we continue to be challenged by healthy infants who die in unsafe sleep environments. In 2006, 52 Michigan babies, or **one child every week** died because of unsafe sleep practices.

How does Michigan compare with the U.S.?

Michigan’s infant mortality rate is consistently above the national average. In 2006, Michigan’s infant mortality rate of 7.4 per 1,000 was higher than the U.S. rate of 6.7 per 1,000 live births.

How are different populations affected?

Historically, the Black infant mortality rate is more than two-and-a-half times that of the White infant mortality rate. In 2006, the Michigan infant mortality rate for Black infants was 14.8 per 1,000 live births, while for White infants it was 5.4 per 1,000. Infant mortality rates are double for unmarried moms in Michigan, 10.4 per 1000 for unmarried mothers compared to 5.4 per 1000 for married mothers. Babies born to mothers with inadequate prenatal care had an infant mortality rate of 18.2 per 1000 in 2006, three times greater than the rate of 6.1 per 1000 for infants born to mothers with adequate prenatal care. Infant mortality rates are higher for babies born to teen mothers. For instance, in 2006, infants born to Michigan



mothers under age 20 had a death rate (IMR) of 10.9 per 1,000. Mothers who use tobacco during pregnancy also experience poorer birth outcomes, with infant mortality rates of 9.9 per 1000.

What is the Department of Community Health doing to improve this indicator?

The Governor signed into law the Safe Delivery of Newborns Act of 2001 which encourages the placement of unwanted newborns in a safe environment. The law allows for an anonymous surrender of an infant, less than 72 hours of age, to an Emergency Service Provider. There have been 64 successful surrenders in Michigan since the Law went into effect, an average of 10 – 12 babies per year. Governor Jennifer M. Granholm declared September as Infant Safe Sleep Month in Michigan to help stem the growing tide of deaths caused by babies being put to sleep in unsafe environments. An on-line Infant Safe Sleep training module has been developed and is available to health care providers and the public.

The Michigan Women, Infants, and Children program (WIC) provides nutrition, education, and referral services to more than 200,000 moms, babies, and children less than age 5 every month. Services include breast-feeding education and support, infant formula, and nutrition education referrals to other community health services. WIC services generally result in increased birth weight, longer gestational age, and lower incidence of pre-term birth.

Interconception Care Projects are funded in 11 target communities in Michigan: Berrien, Genesee, Ingham, Kalamazoo, Kent, Macomb, Oakland, Saginaw, Washtenaw, Wayne and in Detroit. Women are enrolled into direct service pilot projects that provide evidenced based services to women with a previous poor pregnancy outcome. Registered nurses provide home-based education and case management services to improve health before a subsequent pregnancy. The projects' goals are to reduce the number of premature and low birth weight babies, increase time intervals between pregnancies, and increase the number of pregnancies which are planned.

The Maternal and Infant Health Program (MIHP), through contracts with the Department and other providers, offers services to Medicaid-eligible pregnant women and infants who receive support services from a nurse, social worker, and nutritionist.

The Nurse-Family Partnership (NFP) is a program in which nurses visit low-income women in their homes during their first pregnancies through the first two years of their children's lives. The major goals are to improve pregnancy outcomes by helping women improve health behaviors; improve child health and development by teaching competent and responsible parenting skills; and improve families' economic self-sufficiency. The Nurse-Family Partnership program is available in Benton Harbor, Detroit, Grand Rapids, Pontiac and Kalamazoo.

Michigan Sudden Unexpected Infant Death Programs aim to reduce infant mortality through efforts to educate the public and providers about the risks for SUIDS and sudden infant death, to provide grief support for those affected by an infant death, and to promote an optimal outcome for the next pregnancy. An autopsy and death scene investigation reimbursement component serves to improve the information available on cause and manner of sudden unexpected infant death.

Fetal and Infant Mortality Review Teams are in place in 16 Michigan sites, establishing core MCH surveillance in the communities which account for approximately 75% of Michigan's infant deaths. These multidisciplinary review teams systematically examine fetal and infant deaths to determine gaps in care and resources in a community, and factors that contribute to these poor pregnancy outcomes.

Michigan newborns are tested for 50 disorders, many of them potentially fatal and/or debilitating. The **Newborn Screening Program** is conducted jointly by the Bureau of Laboratories and the Bureau of Epidemiology. Program efforts assures that: 1) all Michigan infants are screened; 2) follow-up is provided for infants with positive and borderline screening tests including access to treatment and a medical home, and 3) health outcomes are assessed and monitored through the long term follow-up.